REMARKS:

Claims 1-20 are pending in the instant application, claim 21 being cancelled herein. In the Office Action dated March 18, 2003, the Examiner has objected to the drawings and to a portion of the written description that incorporates a pending U.S. Patent Application by title without referencing a corresponding serial number.

The Examiner has rejected all claims under 35 U.S.C. § 112, 2nd paragraph in the referenced Office Action. Claims 1-19 are rejected thereunder for omitting an active essential step; and claims 20-21 are rejected thereunder for insufficient antecedent basis. The Examiner has further rejected claim 1 under obviousness-type double patenting in light of U.S. Patent No. 6,466,970B2 to Lee et al (hereinafter, Lee).

The Examiner has further rejected claims 1, 2, 4-12, and 14-21 under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,286,030B1 to Wenig et al (hereinafter, Wenig) in view of U.S. Patent No. 6,477,538B2 to Yaginuma et al (hereinafter, Yaginuma), and claims 3 and 13 as obvious over the combination of Wenig and Yaginuma further in view of U.S. Patent No. 6,223,215B1 to Hunt et al (hereinafter, Hunt). Applicant will address each objection and rejection in the order presented by the Examiner in the Office Action.

1. Drawings:

Applicant herein submits formal drawings that correct the cited deficiencies, to replace those previously submitted.

2. Written Description:

Applicant has herein amended three paragraphs of the written description to correct grammatical errors (at pages 7 and 10), to change a citation from an application to a now-issued U.S. Patent (at page 10), and to include the objected lack of an application serial number for an incorporated reference (at page 11).

3. Rejections under 35 U.S.C. § 112, 2nd paragraph:

Applicant has herein amended claims 1-20, either individually or a claim from which one depends, to obviate the rejections for omitted active step and antecedent basis. Additional changes are made to certain of the claims to clarify and/or consolidate language. Substantial subject matter of cancelled claim 21 is combined into claim 20.

4. Rejection under Obviousness-Type Double Patenting:

The Examiner has asserted that claim 1 of the present application is not patentably distinct over Lee. The Examiner cites that claim 1 of the present application and the claims of Lee each refer to a process/method of providing a user with the ability to generate/derive a conversion/micro-conversion rate. Applicant respectfully submits that Lee does not graphically represent clickstream data from one or more micro-conversions in a first visualization as recited in claim 1. Rather, Lee provides in each independent claim (Lee, claims 1, 16, 17 and 18) a conversion rate set having a plurality of rates, each rate having a rate object, a rate event, and a rate value. Lee describes a conversion rate at col. 12, lines 58-59 as describing the likelihood of one event translating into a second event. Pending claim 1 does not graphically represent likelihoods (an estimate) but rather clickstream data (measured historical or real-time events). Additionally, Figure 8 of Lee is an example of a conversion rate set. It is a textual representation, whereas claim 1 recites a graphical representation. Applicant contends *arguendo* that even if the conversion rate set of Lee were depicted graphically, claim 1 would remain patentably distinct from Lee due to the difference in the underlying matter represented. Additionally, claim 1 describes the storage and retrieval of the graphical representations of clickstream data and also the graphical comparison or visual analysis of various classes of graphical representations of clickstream data, which are not apparent in Lee. Applicant respectfully requests the Examiner reconsider the double-patenting rejection and withdraw it in light of the arguments and claim changes made herein.

5. Rejections under 35 U.S.C. § 103(a):

Respecting claim 1, the Examiner admits that Wenig fails to disclose and teach "graphically representing clickstream data from one or more micro-conversions in a first visualization" as

recited in claim 1, but asserts that Yaginuma does so teach. Applicant respectfully contends that Yaginuma includes no teaching as to graphically representing clickstream data. The Examiner's pinpoint citations (Yaginuma, col. 13, lines 30-32 figs. 6 and 37) appear directed toward storing and displaying mined data from a user's selection. There appears no teaching in Yaginuma to clickstream data specifically, or to any sequential stream of data generally.

The three specific examples presented in Yaginuma are automobile specifications (figures 10, 12), groceries (figures 27, 29, 32-33), and industry classifications (figures 34, 35, 37, 40). Each of these appears to be displays of data points in a static database that are independent of one another. As described at page 2, lines 9-10, of the present specification, clickstream data is a generic term to describe visitors' paths through one or more web sites. Clickstream being a 'path', each subsequent data point in a clickstream depends from the previous data point. Yaginuma includes no teaching as to a stream of interdependent data points. Teachings as to displays of independent data points are of marginal value in formulating a display of interdependent data points. Using the parallel coordinate display as an example, a user of Yaginuma's invention may select as parallel axes of the display the parameters A, B and C; A, B and D or even A, C and D. In contrast, a user of the present invention may select A, but is constrained in further selecting B, C or D by the clickstream itself; B, C or D may be selected only if there is a 'path' from A. Furthermore, if B is the only link between A and C or D, then B cannot be disregarded else there is no path to C and/or D. Wenig does include teaching as to visually recreating a user session, but that teaching appears limited to repeating the sequence of web pages visited (Wenig, col. 5, lines 14-18; 25-29) with the addition of environmental data such as traffic volume (col. 5, line 66 to col. 6, line 9). Wenig does not appear to inform how to modify a display such as Yaginuma to illustrate interdependent data points. Hunt also does not appear to include such teaching. For at least the above reasons, Applicant contends that claim 1 is not obvious over the combination of Wenig with Yaginuma and/or Hunt.

Claim 2 is amended herein to add that the first visualization comprises a polygonal line that terminates at an axis wherein the shopping session ends. Claim 5 includes language reciting polygonal line dropouts. The Examiner has cited Yaginuma col. 6 line 40 to col. 7, line 2 and figures 6, 12, 34, 45 and 47 as teaching polygonal line dropouts (and other teachings). Applicant contends that Yaginuma does not teach dropouts, and that each and every polygonal line of Yaginuma intersects each and every axis. Specifically, Yaginuma teaches displaying the same number of coordinate axes as fields detected (col. 6, lines 43-45); searching the entire record and obtaining values for *each* field (col. 6, lines 49-50) (emphasis added); and connecting the data points (i.e., the obtained values for each field) with a line (col. 7, lines 1-2). There appears no option in Yaginuma for a line that does not pass through each and every coordinate axis. Similarly, none of the cited figures appears to display a line that does not intersect each and every axis. Figures 29, 32 and 33 are more nebulous in that respect, but each line appears to intersect another and continue through each axis, and the associated text makes no mention of a line discontinuity. Thus any ambiguity in Yaginuma's figures 29, 32 and 33 cannot teach dropouts without benefit of impermissible hindsight. Wenig and/or Hunt do not appear to include teachings concerning dropouts, and Applicant asserts that claims 2 and 5 are non-obvious for that reason over any combination of Wenig, Yaginuma, and Hunt.

Claim 5 recites that the first visualization comprises parallel axes of sequential events and dependent variable values of timestamps. The above clause preceding the conjuction "and" is distinguished over Yaginuma for the same reason as recited above with respect to claim 1. The clause following the conjuction is exactly the opposite of Yaginuma: each parallel axis of

Yaginuma is an independent variable. In the automobile example of Yaginuma, a user mining data may select any specification parameter (e.g., no. of cylinders, weight, mileage, country of manufacture) independent of one another for the axes of the display. Claim 5 recites that the axes are dependent variables of timestamps. Additionally, Yaginuma does not appear to include teaching as to timestamps, which is consistent with Applicant's assertion that Yaginuma is directed to mining static databases listing independent datapoints. While Hunt does mention timestamps, there appears no obvious combination of the timestamps of Hunt to the displays of independent datapoints of Yaginuma absent hindsight focused by the present application. Both Wenig and Hunt fail to teach a visualization that comprises parallel axes of sequential events, and Applicant asserts that claim 5 is non-obvious for that reason over any combination of Wenig, Yaginuma, and Hunt.

For at least the above reasons, Applicant contends that each of claims 1-20 are patentable over the cited art. Applicant respectfully requests that the Examiner withdraw all rejections and pass claims 1-20 as amended herein to issuance.

Respectfully submitted:

July 18, 2003
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